

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040821\
 Data File : VL036754.D
 Acq On : 8 Apr 2021 17:24
 Operator : SY/AP
 Sample : M1981-02DL 40X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-4DL

Manual Integrations
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 4/12/2021 11:46:55 AM

Quant Time: Apr 09 12:13:48 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 2
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1501205	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	3726431	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3009951	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1899756	7.92	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	79.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.25	62	170118	1.670	ppbv	94
9) Propene	3.01	41	168134	1.880	ppbv	93
10) Heptane	8.12	43	105952	0.465	ppbv	98
15) Acetone	3.84	43	3282123	22.213	ppbv	99
19) Isopropyl Alcohol	3.97	45	178253	2.193	ppbv #	1
20) Methylene Chloride	4.34	84	34861	0.504	ppbv	98
22) trans-1,2-Dichloroethene	4.87	96	15080m	0.229	ppbv	
26) Hexane	5.68	57	102571	0.629	ppbv #	45
27) Carbon Disulfide	4.55	76	90891	0.566	ppbv #	88
30) Cyclohexane	7.13	84	80588	0.610	ppbv #	86
31) cis-1,2-Dichloroethene	5.54	61	308047	1.954	ppbv	99
34) 2-Butanone	5.24	43	631918	3.474	ppbv	98
36) Benzene	6.89	78	208819m	0.608	ppbv	
38) Trichloroethene	7.83	130	345359	2.582	ppbv	93
44) 2,2,4-Trimethylpentane	7.87	57	1548641	2.560	ppbv #	73
53) Toluene	9.80	91	134049	0.366	ppbv	99
58) Ethyl Benzene	12.71	91	157999m	0.361	ppbv	
59) m/p-Xylene	12.96	91	371680m	0.973	ppbv	
60) o-Xylene	13.69	91	315012	0.853	ppbv	96
62) Isopropylbenzene	14.67	105	76064m	0.153	ppbv	
67) sec-Butylbenzene	17.28	105	62257	0.102	ppbv	98
69) p-Isopropyltoluene	17.65	119	101162m	0.213	ppbv	
72) 4-Ethyltoluene	15.84	105	105380	0.260	ppbv #	92
73) 1,3,5-Trimethylbenzene	16.00	105	196032m	0.519	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	298020	0.737	ppbv #	67
79) Naphthalene	22.21	128	39893m	0.169	ppbv	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

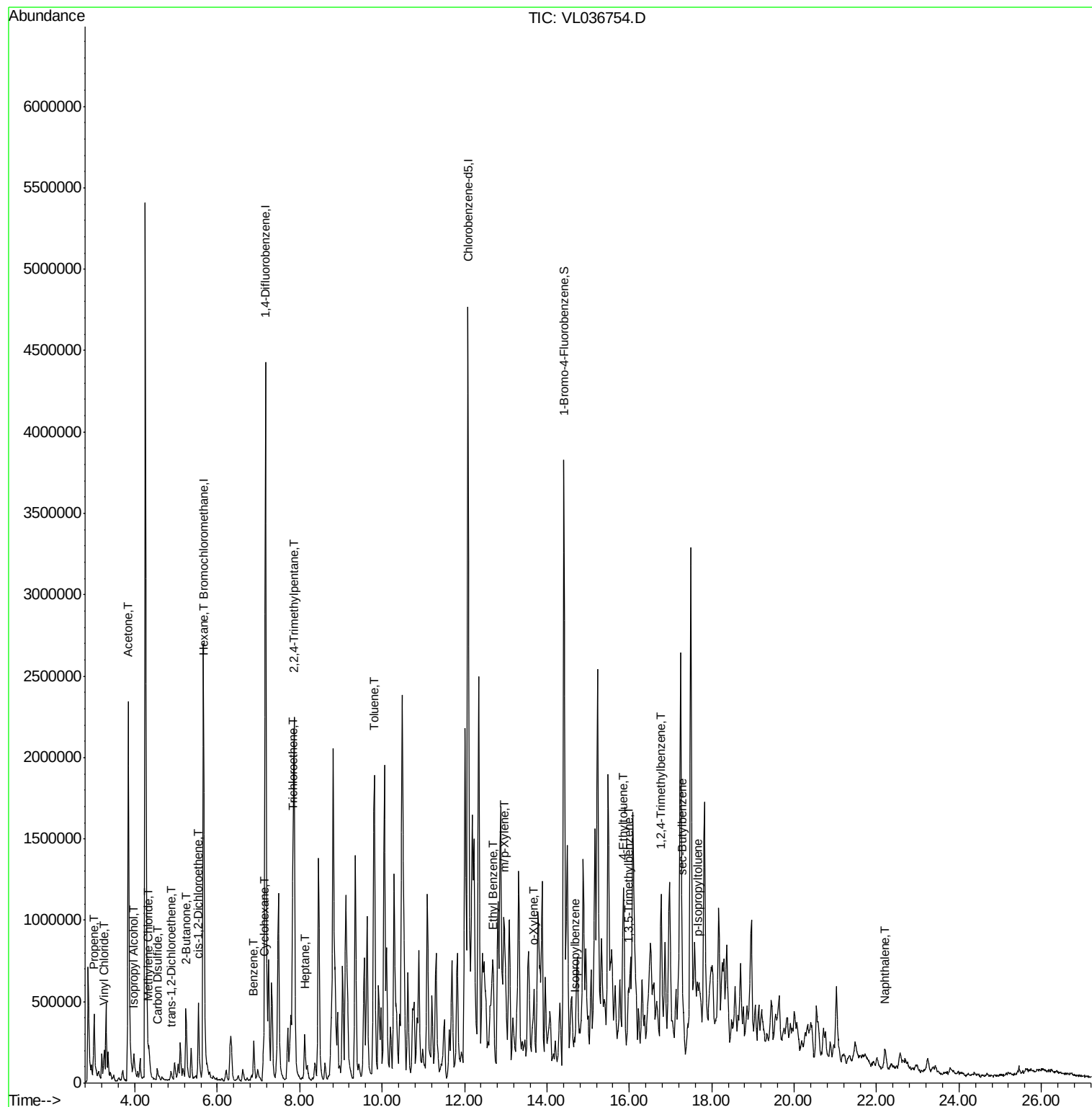
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040821\
Data File : VL036754.D
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Misc : 400mL/MSVOA L
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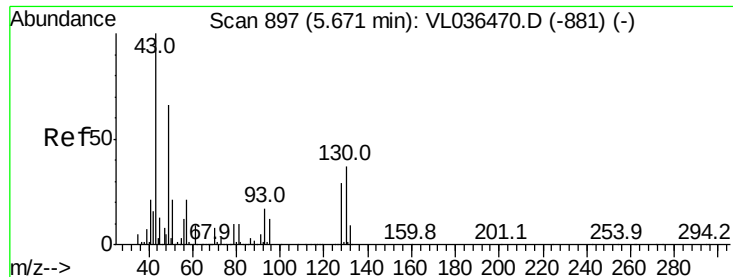
Instrument :
MSVOA_L
ClientSampleId :
SG-4DL

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4/12/2021 11:46:55 AM

Quant Time: Apr 09 12:13:48 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

ClientSampled :

SG-4DL

Tot Ion: 49 Resp: 1501205

Ion Ratio Lower Upper

49 100

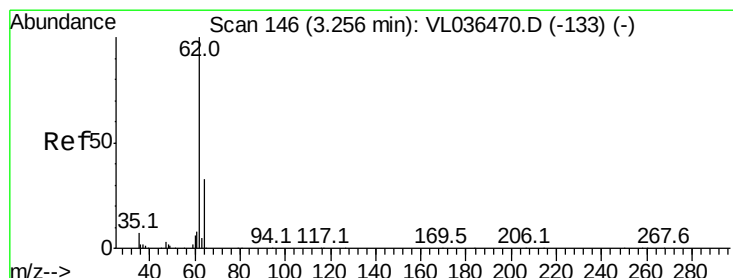
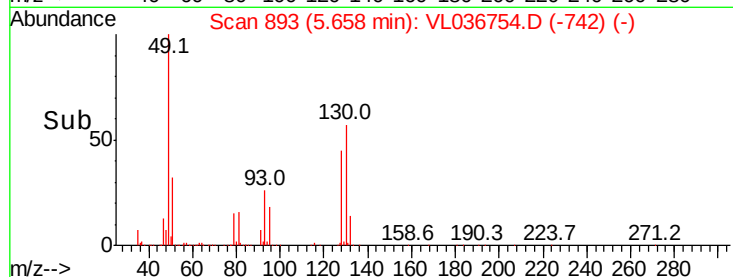
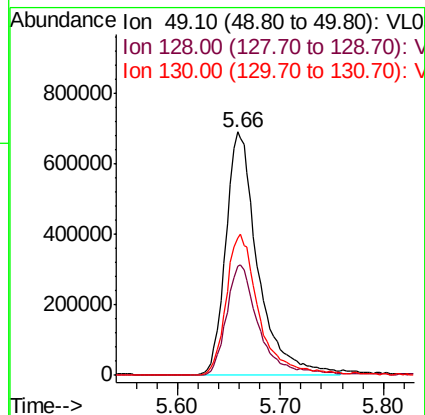
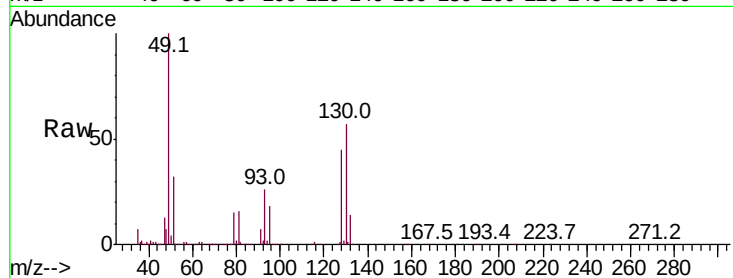
128 46.3 23.5 70.6

130 60.3 29.1 87.4

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#5

Vinyl Chloride

Concen: 1.670 ppbv

RT: 3.25 min Scan# 144

Delta R.T. -0.01 min

Lab File: VL036754.D

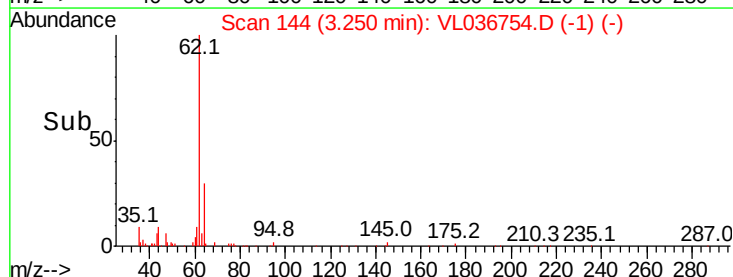
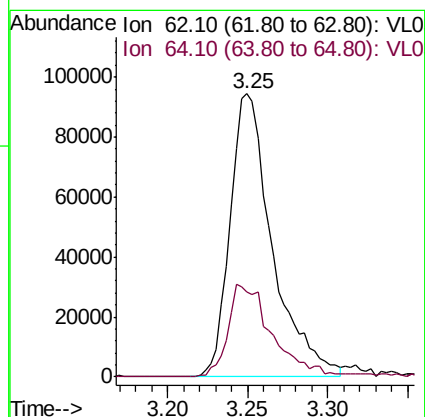
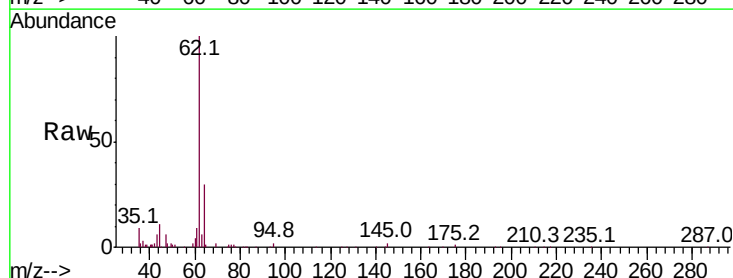
Acq: 8 Apr 2021 17:24

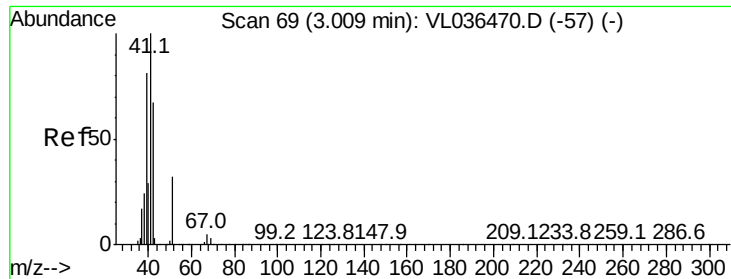
Tgt Ion: 62 Resp: 170118

Ion Ratio Lower Upper

62 100

64 29.6 26.4 39.6





#9

Propene

Concen: 1.880 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.00 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

ClientSampled :

SG-4DL

Tot Ion: 41 Resp: 168134

Ion Ratio Lower Upper

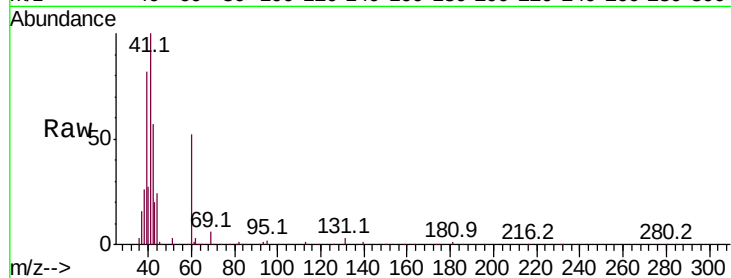
41 100

42 65.8 57.0 85.4

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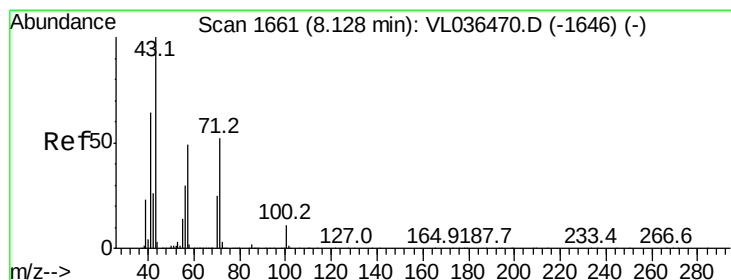
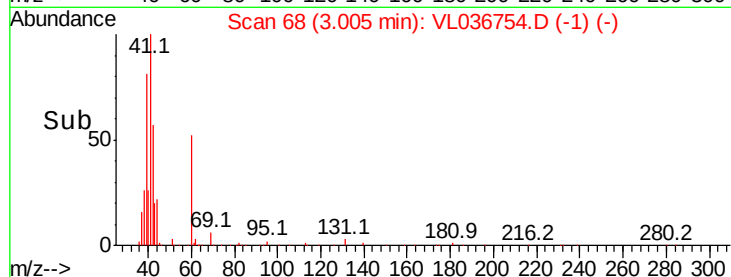
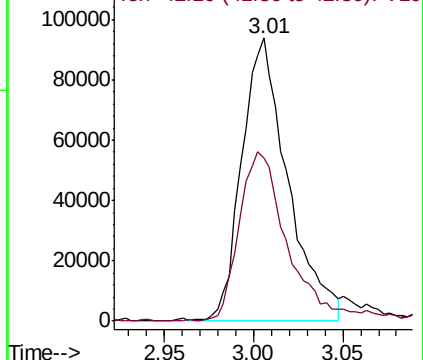
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.465 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. -0.01 min

Lab File: VL036754.D

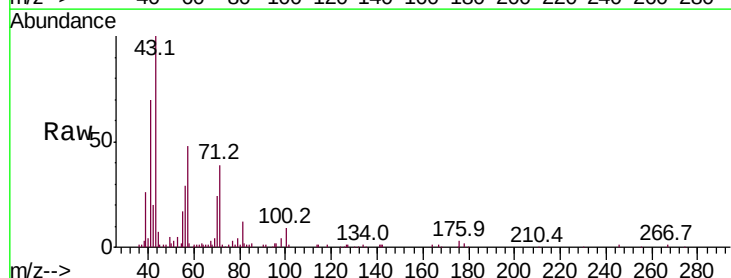
Acq: 8 Apr 2021 17:24

Tgt Ion: 43 Resp: 105952

Ion Ratio Lower Upper

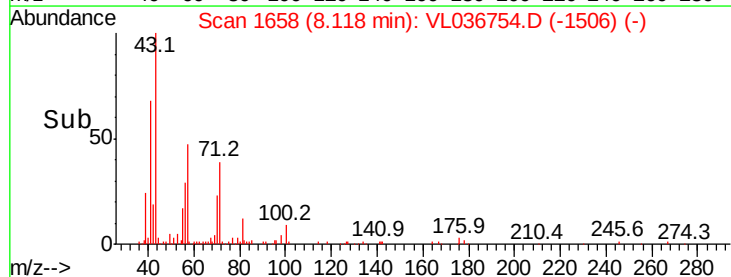
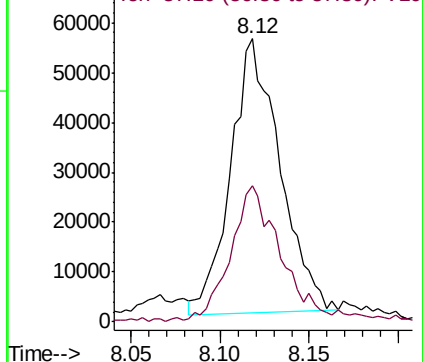
43 100

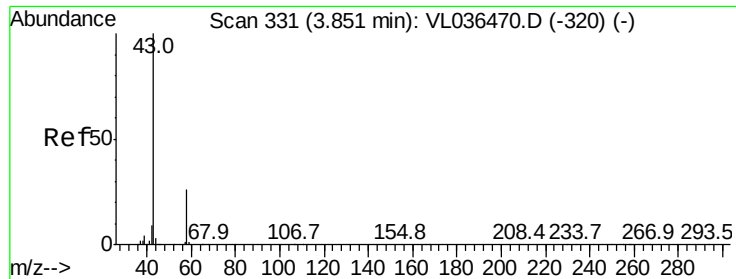
57 50.0 39.0 58.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#15

Acetone

Concen: 22.213 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

ClientSampleId :

SG-4DL

Tot Ion: 43 Resp: 3282123

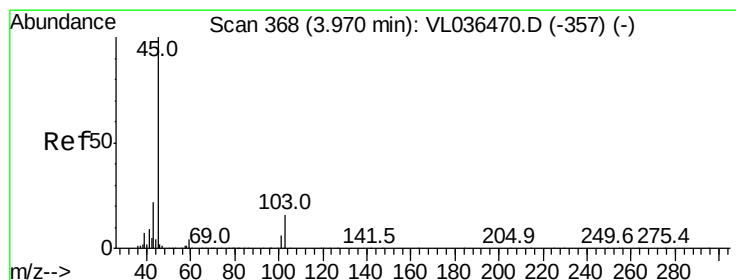
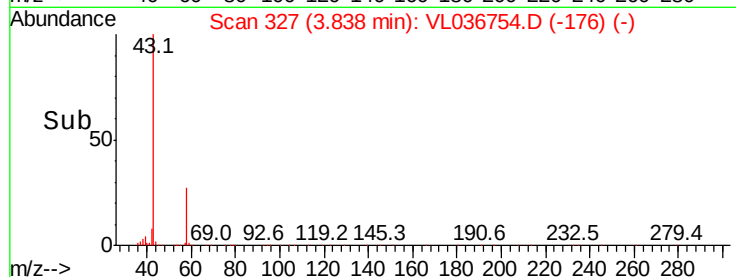
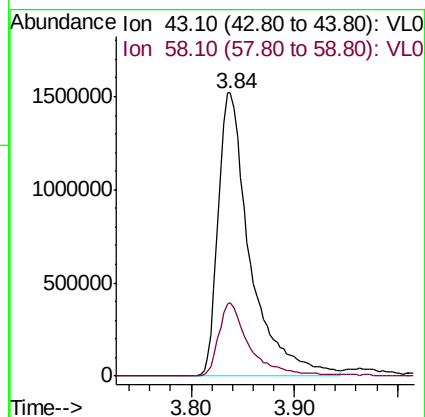
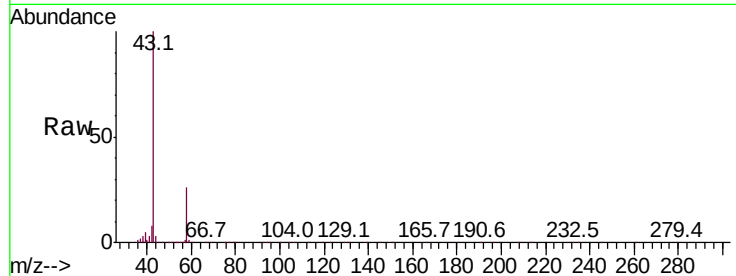
Ion Ratio Lower Upper

43 100

58 25.9 21.2 31.8

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#19

Isopropyl Alcohol

Concen: 2.193 ppbv

RT: 3.97 min Scan# 368

Delta R.T. -0.00 min

Lab File: VL036754.D

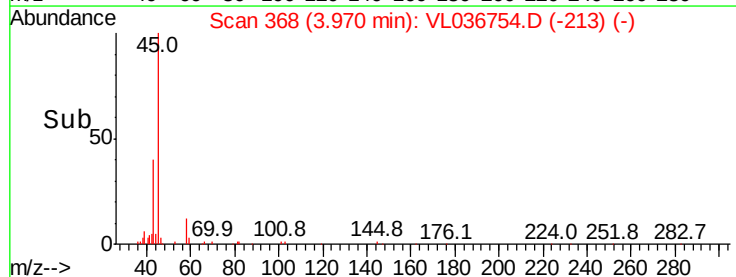
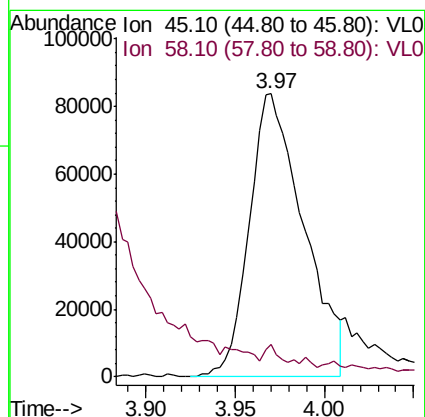
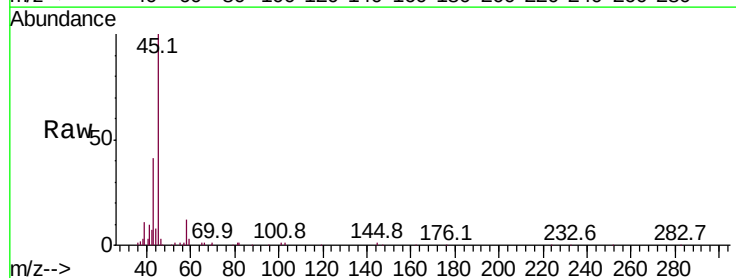
Acq: 8 Apr 2021 17:24

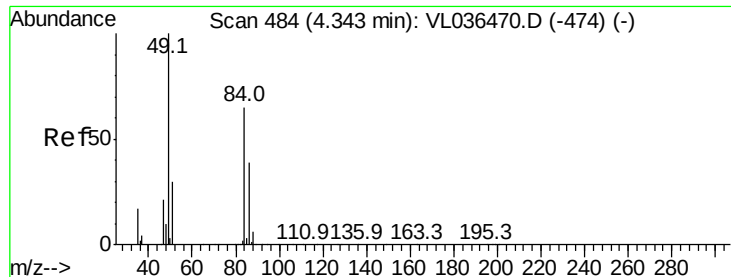
Tgt Ion: 45 Resp: 178253

Ion Ratio Lower Upper

45 100

58 476.9 2.9 4.3#





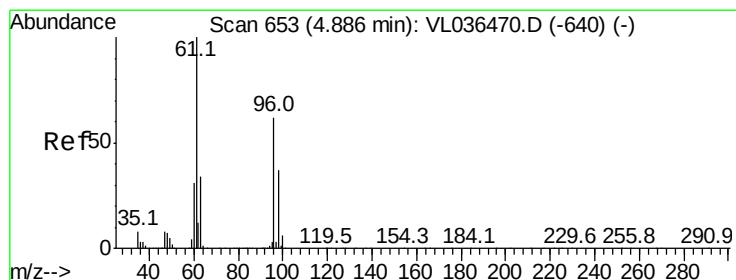
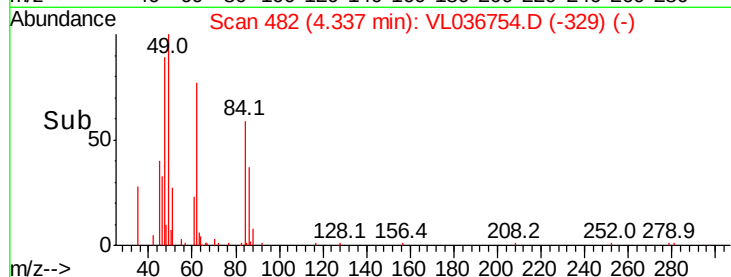
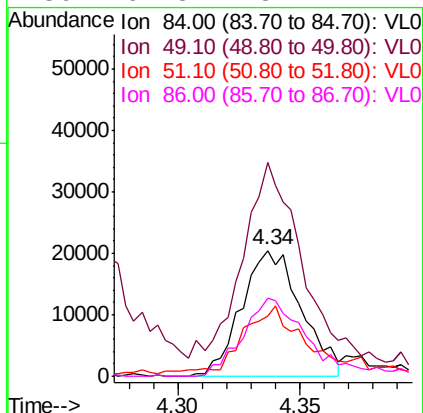
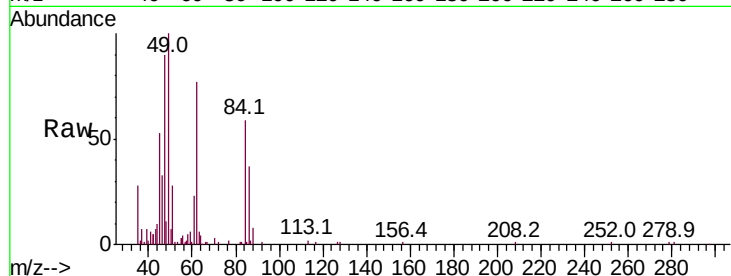
#20
Methylene Chloride
Concen: 0.504 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Instrument :
MSVOA_L
ClientSampleId :
SG-4DL

Tot Ion:	84	Resp:	34861
Ion	Ratio	Lower	Upper
84	100		
49	154.3	122.9	184.3
51	41.7	36.9	55.3
86	62.3	48.2	72.4

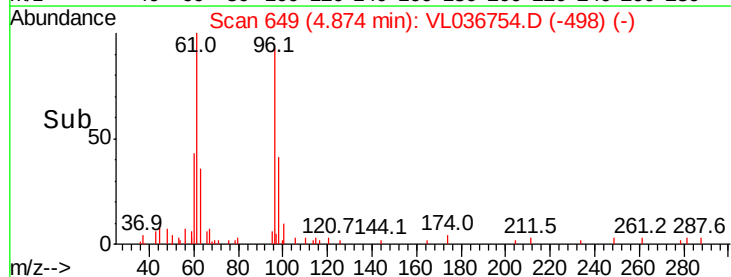
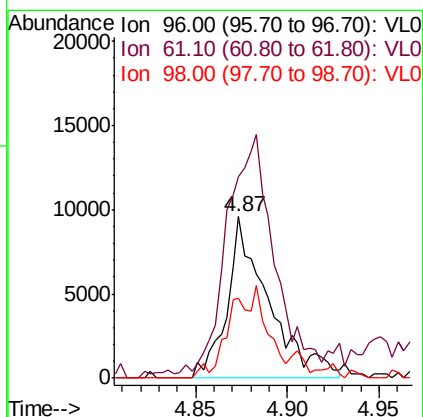
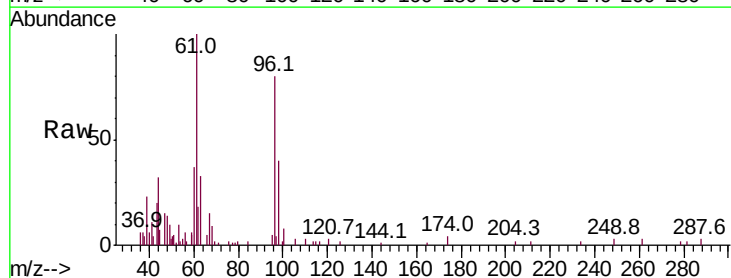
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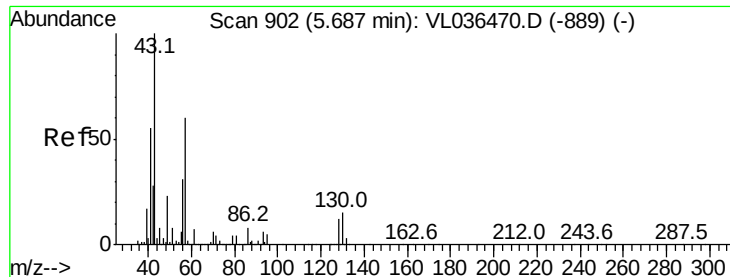
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#22
trans-1,2-Dichloroethene
Concen: 0.229 ppbv m
RT: 4.87 min Scan# 649
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Tgt Ion:	96	Resp:	15080
Ion	Ratio	Lower	Upper
96	100		
61	125.1	129.4	194.0#
98	49.7	48.2	72.4





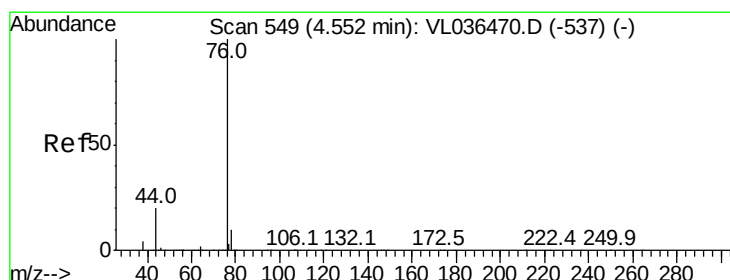
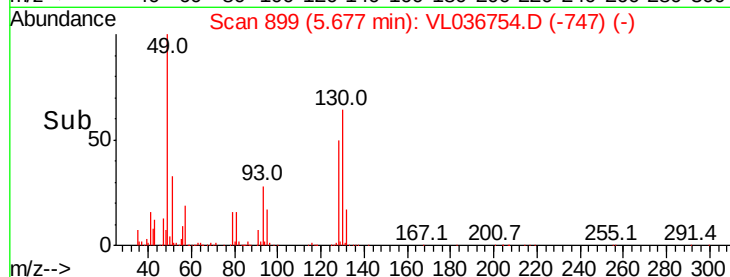
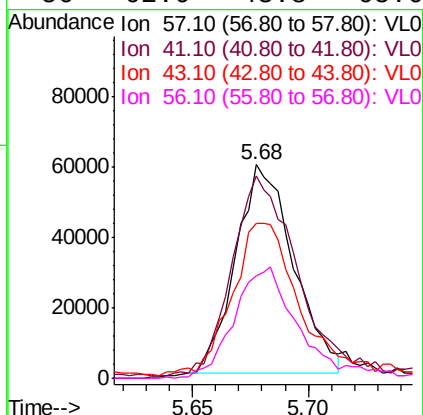
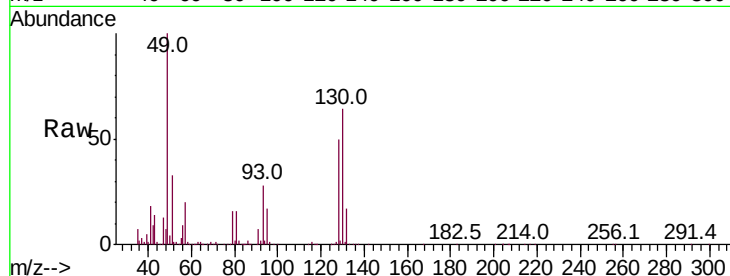
#26
Hexane
Concen: 0.629 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Instrument :
MSVOA_L
ClientSampleId :
SG-4DL

Tot Ion	57	Resp	102571
Ion	Ratio	Lower	Upper
57	100		
41	112.6	77.2	115.8
43	85.2	173.8	260.6#
56	62.0	43.8	65.6

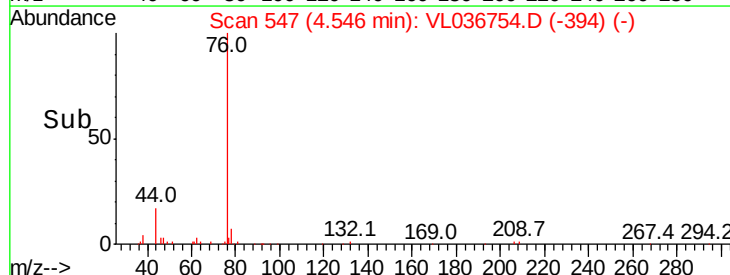
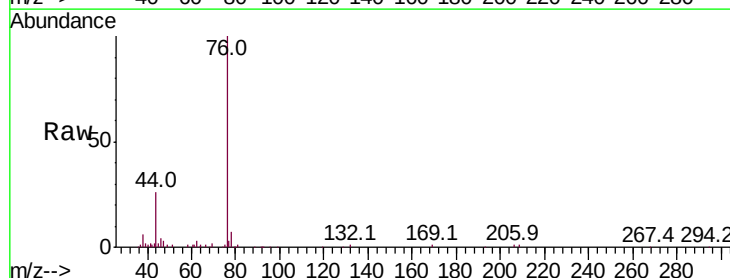
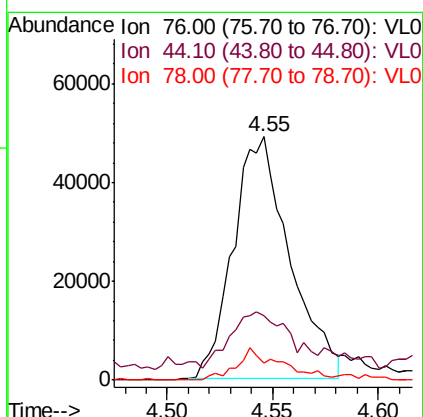
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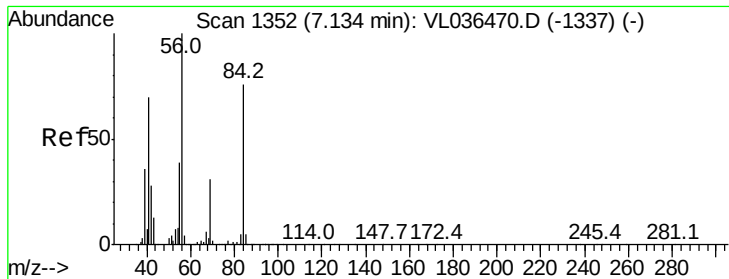
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#27
Carbon Disulfide
Concen: 0.566 ppbv
RT: 4.55 min Scan# 547
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Tgt Ion	76	Resp	90891
Ion	Ratio	Lower	Upper
76	100		
44	29.9	17.5	26.3#
78	12.2	8.6	13.0





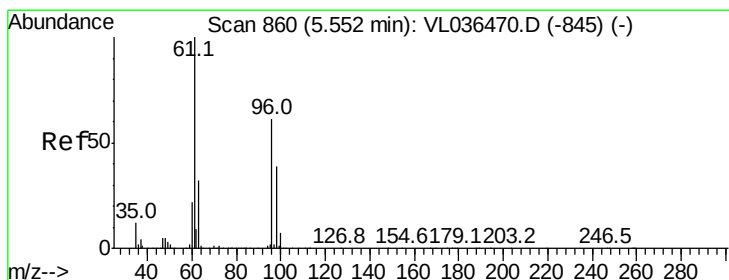
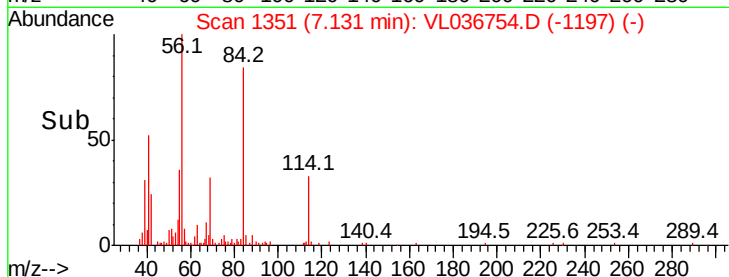
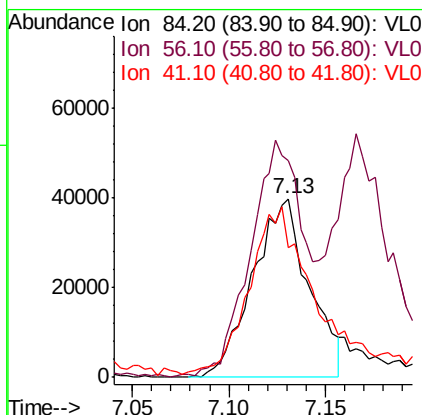
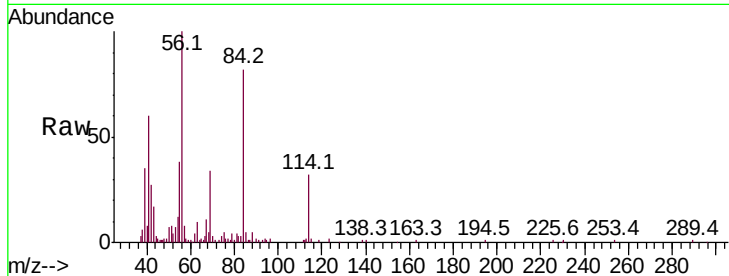
#30
Cyclohexane
Concen: 0.610 ppbv
RT: 7.13 min Scan# 1351
Delta R.T. -0.00 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Instrument :
MSVOA_L
ClientSampleId :
SG-4DL

Tot Ion	Ratio	Lower	Upper
84	100		
56	132.9	114.6	171.8
41	116.3	75.3	112.9

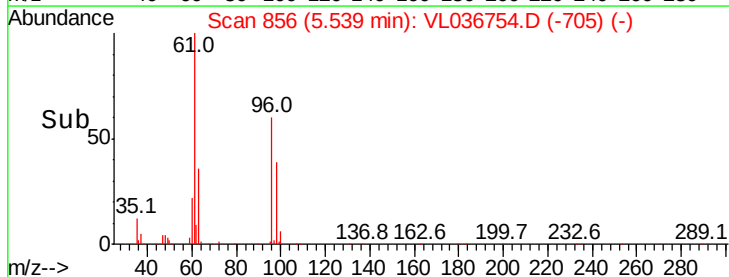
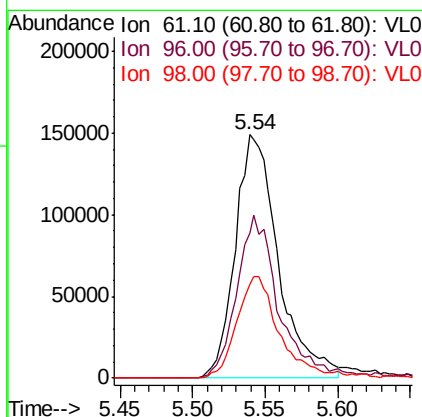
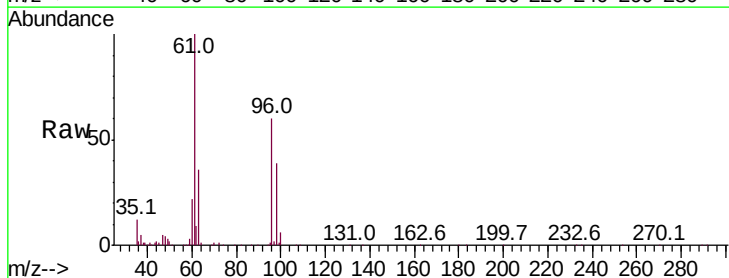
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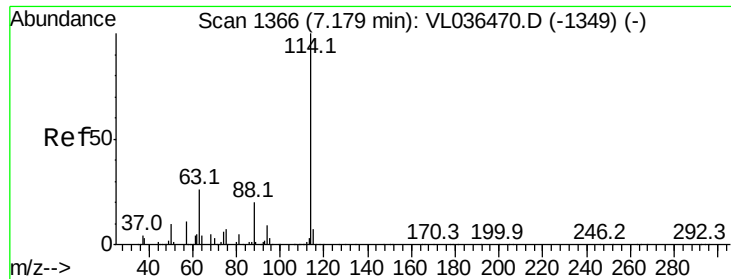
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#31
cis-1,2-Dichloroethene
Concen: 1.954 ppbv
RT: 5.54 min Scan# 856
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Tgt Ion	Ratio	Lower	Upper
61	100		
96	59.6	48.7	73.1
98	38.8	31.4	47.0





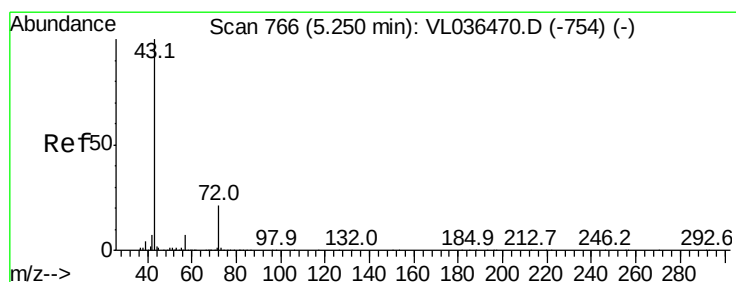
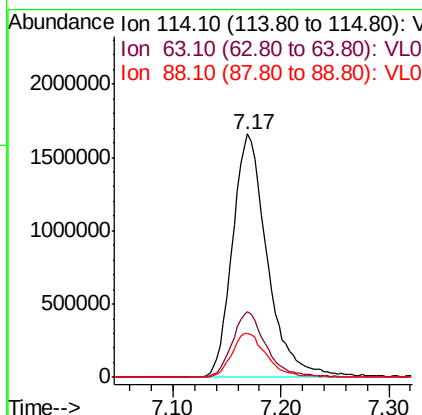
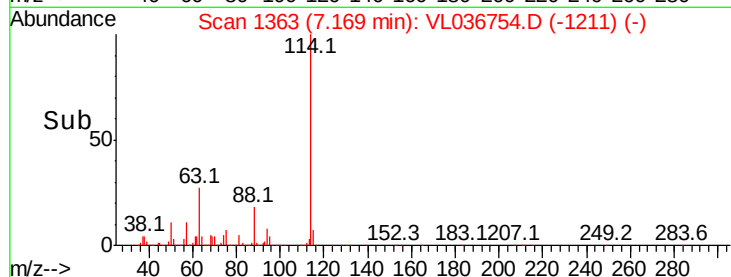
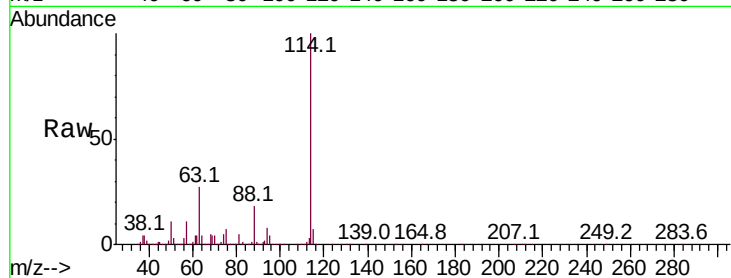
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Instrument :
MSVOA_L
ClientSampled :
SG-4DL

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.6	22.4	33.6
88	18.4	15.4	23.0

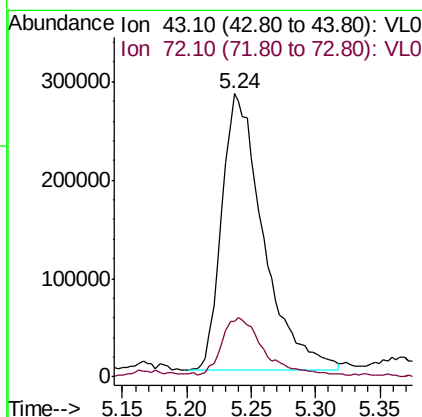
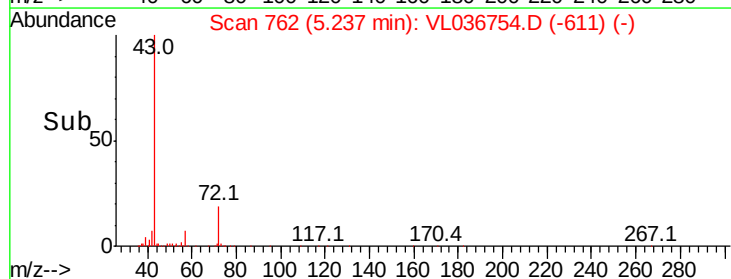
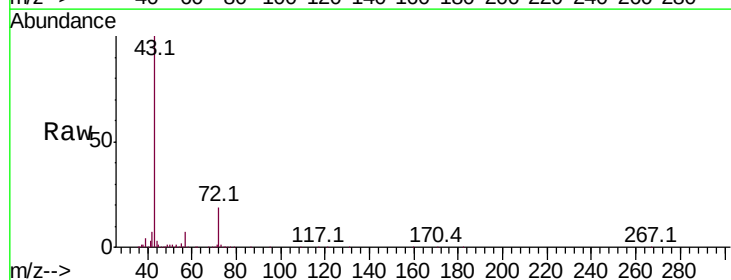
Manual Integrations
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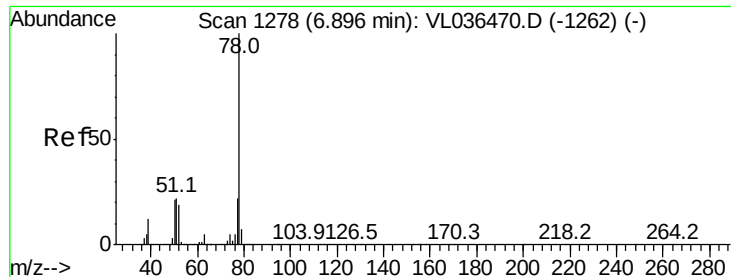
MMDadoda
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#34
2-Butanone
Concen: 3.474 ppbv
RT: 5.24 min Scan# 762
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.3	17.0	25.6





#36

Benzene

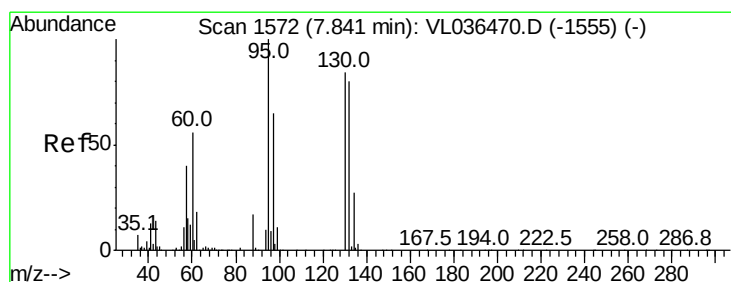
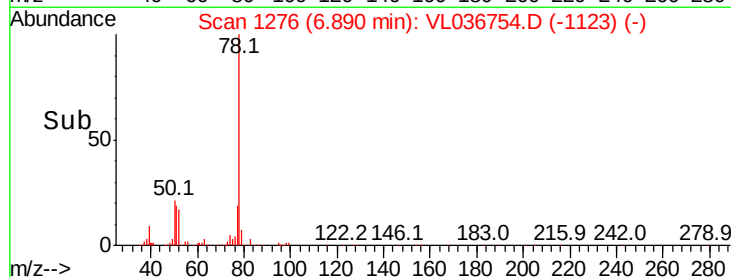
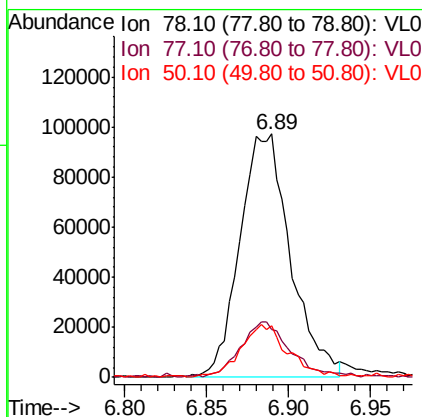
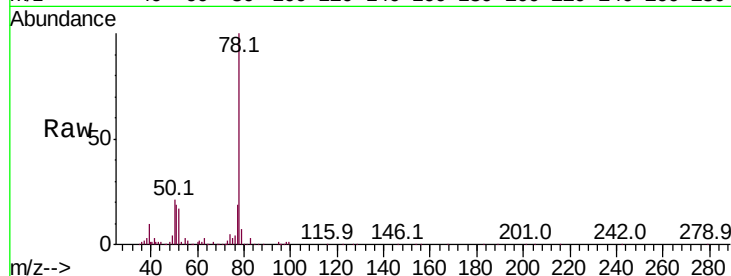
Concen: 0.608 ppbv m
RT: 6.89 min Scan# 1276
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Instrument :
MSVOA_L
ClientSampleId :
SG-4DL

Tot Ion	Ratio	Lower	Upper
78	100		
77	19.5	18.0	27.0
50	21.1	16.5	24.7

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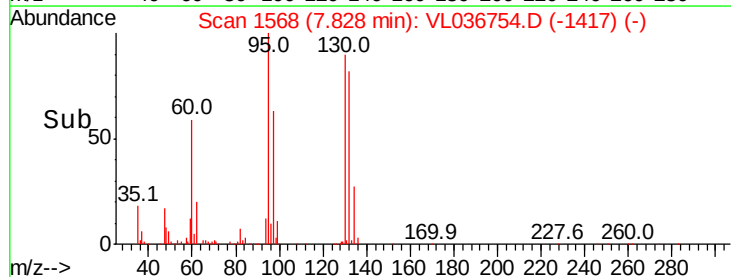
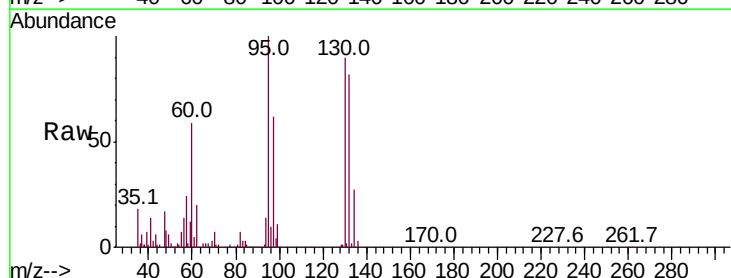
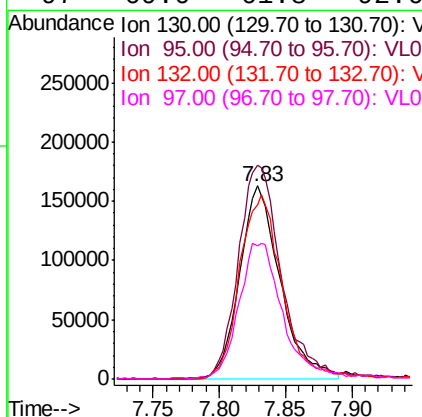


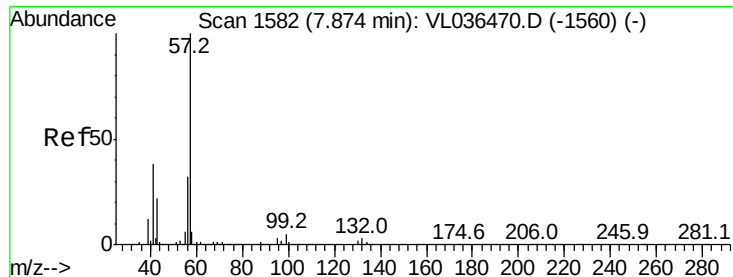
#38

Trichloroethene

Concen: 2.582 ppbv
RT: 7.83 min Scan# 1568
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Tgt Ion	Ratio	Lower	Upper
130	100		
95	110.4	95.7	143.5
132	90.5	76.2	114.4
97	69.0	61.8	92.6





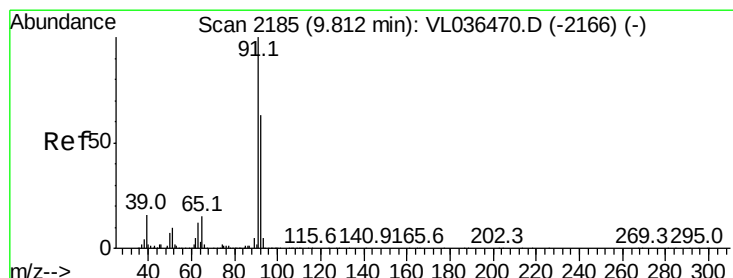
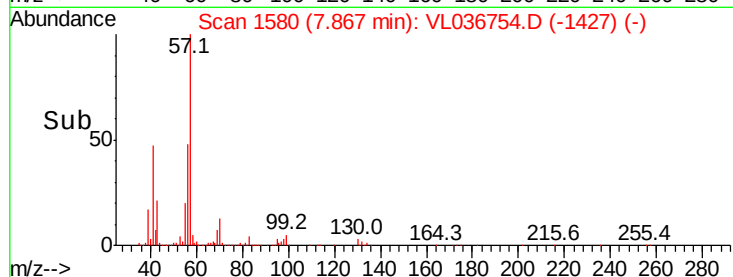
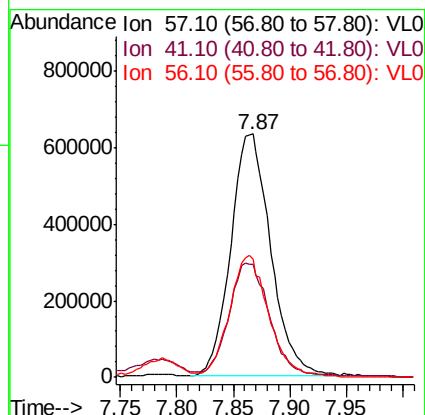
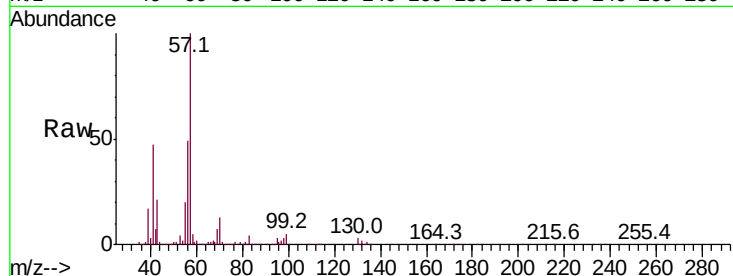
#44
 2,2,4-Trimethylpentane
 Concen: 2.560 ppbv
 RT: 7.87 min Scan# 1580
 Delta R.T. -0.01 min
 Lab File: VL036754.D
 Acq: 8 Apr 2021 17:24

Instrument :
 MSVOA_L
 ClientSampleID :
 SG-4DL

Tot Ion	Ratio	Lower	Upper
57	100		
41	50.1	28.8	43.2#
56	49.9	26.1	39.1#

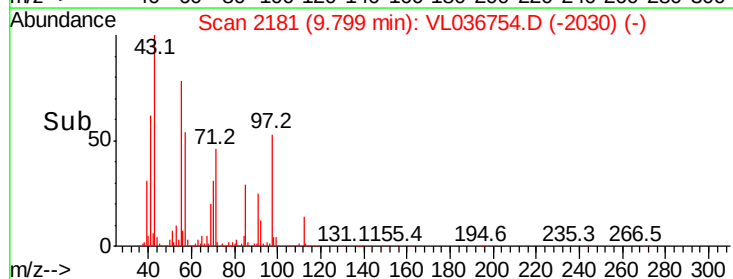
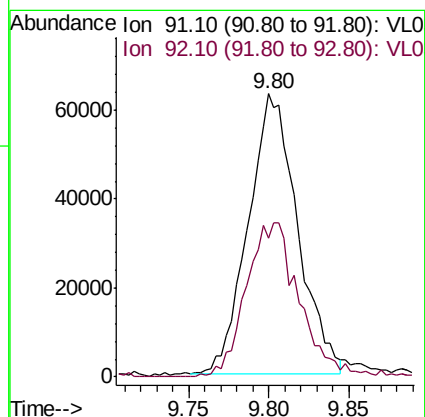
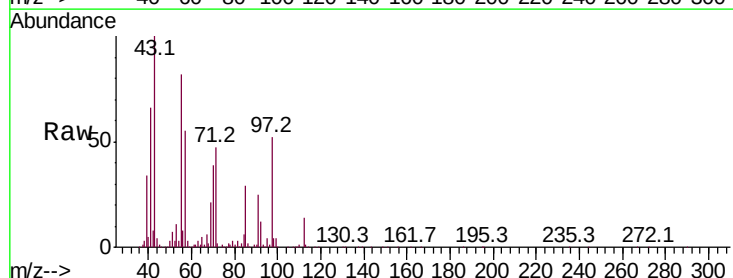
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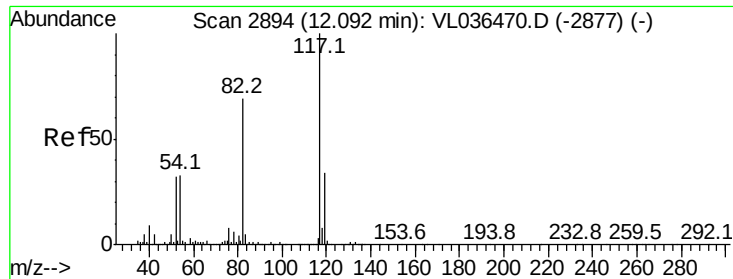
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#53
 Toluene
 Concen: 0.366 ppbv
 RT: 9.80 min Scan# 2181
 Delta R.T. -0.01 min
 Lab File: VL036754.D
 Acq: 8 Apr 2021 17:24

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.8	73.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

ClientSampled :

SG-4DL

Tot Ion:117 Resp: 3009951

Ion Ratio Lower Upper

117 100

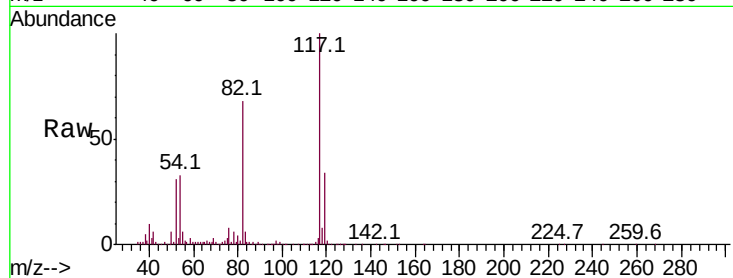
82 66.4 57.4 86.0

119 34.4 47.4 71.0#

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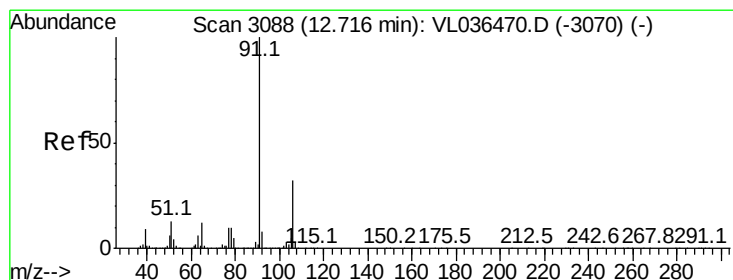
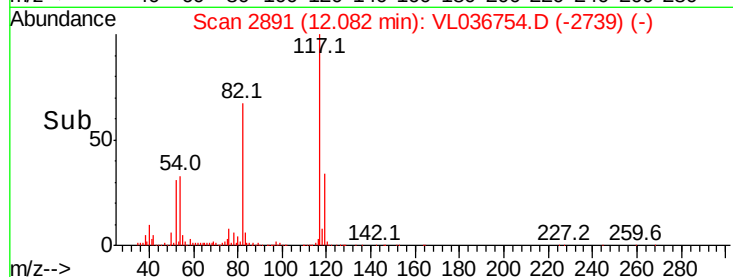
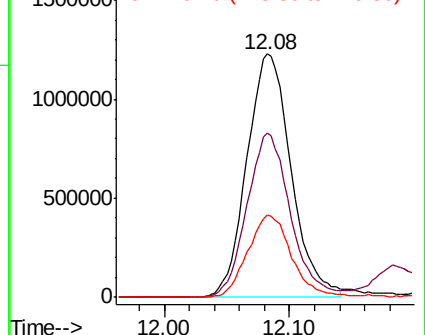
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.361 ppbv m

RT: 12.71 min Scan# 3087

Delta R.T. -0.00 min

Lab File: VL036754.D

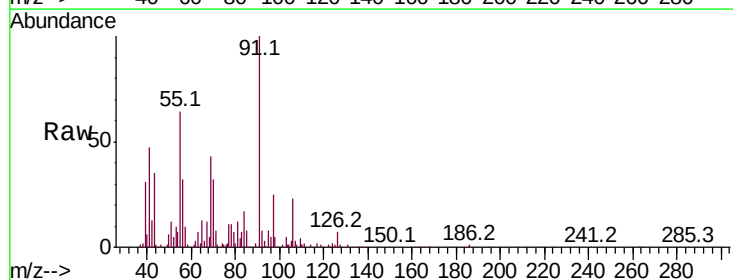
Acq: 8 Apr 2021 17:24

Tgt Ion: 91 Resp: 157999

Ion Ratio Lower Upper

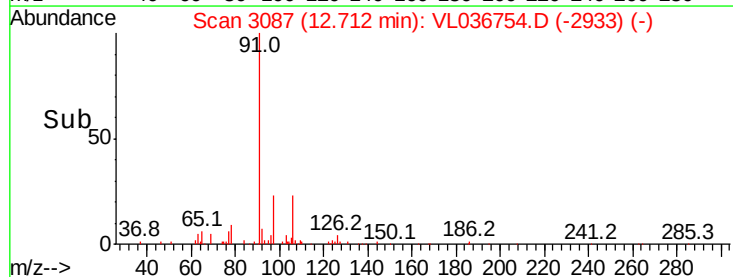
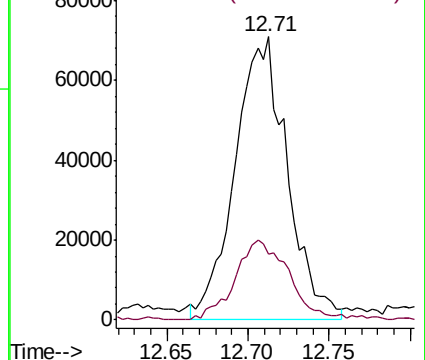
91 100

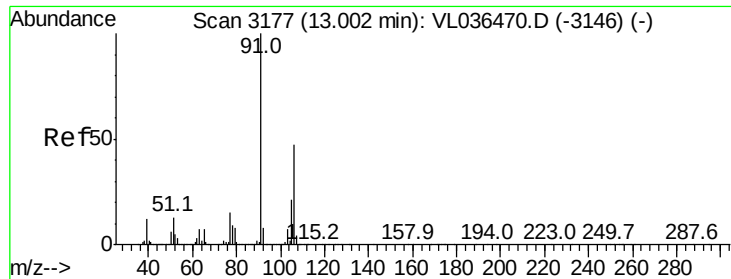
106 23.4 25.3 37.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





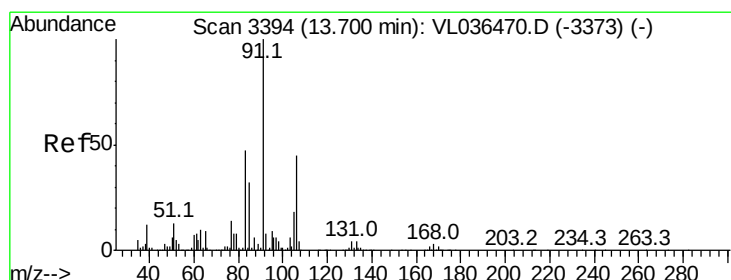
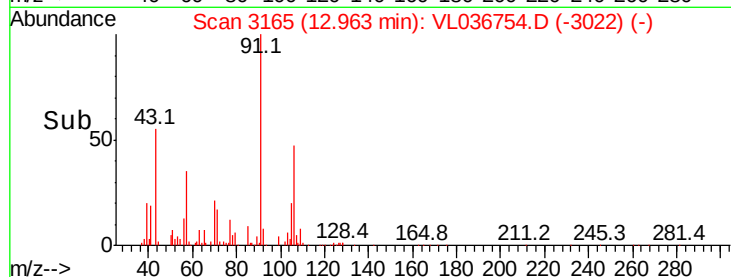
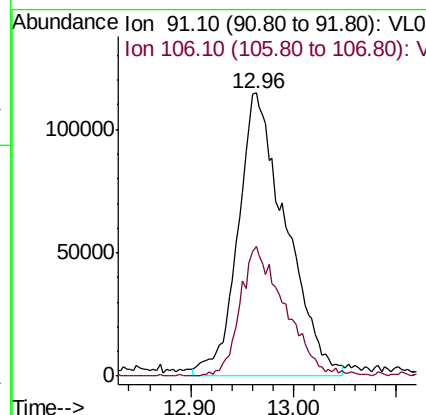
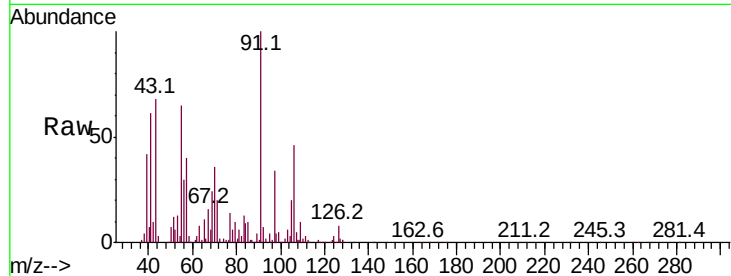
#59
m/p-Xylene
Concen: 0.973 ppbv m
RT: 12.96 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Instrument :
MSVOA_L
ClientSampled :
SG-4DL

Tot Ion: 91 Resp: 371680
Ion Ratio Lower Upper
91 100
106 0.0 35.3 52.9#

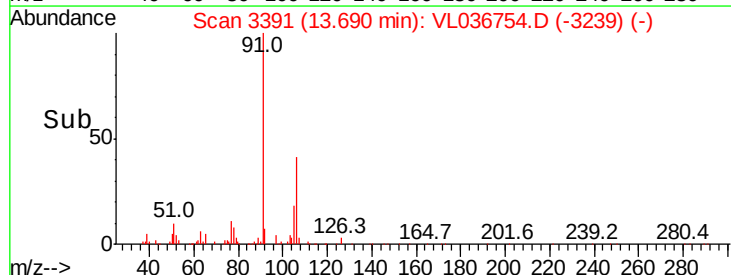
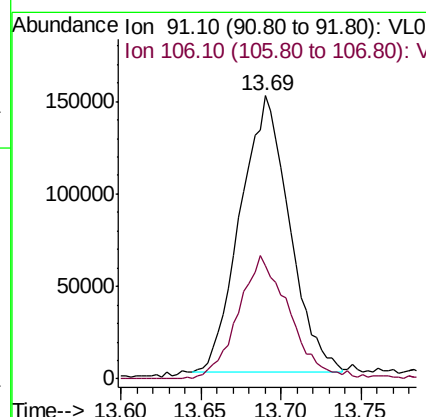
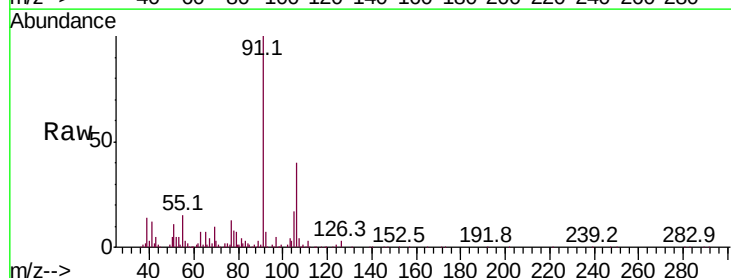
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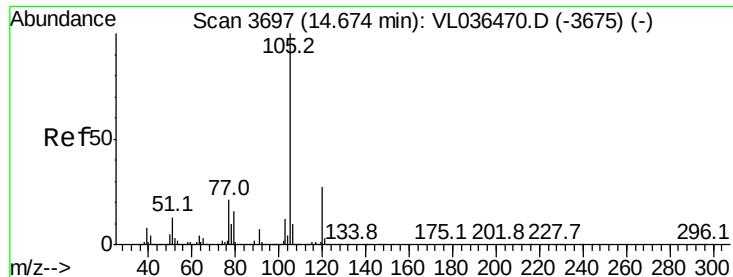
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#60
o-Xylene
Concen: 0.853 ppbv
RT: 13.69 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL036754.D
Acq: 8 Apr 2021 17:24

Tgt Ion: 91 Resp: 315012
Ion Ratio Lower Upper
91 100
106 47.1 22.3 66.9





#62

Isopropylbenzene

Concen: 0.153 ppbv m

RT: 14.67 min Scan# 3695

Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

ClientSampled :

SG-4DL

Tot Ion:105 Resp: 76064

Ion Ratio Lower Upper

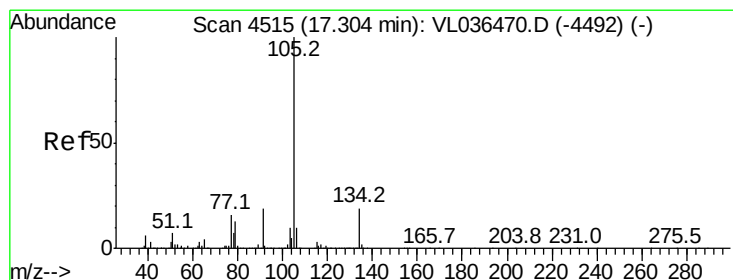
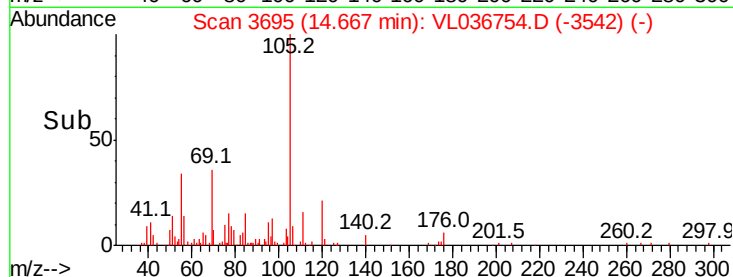
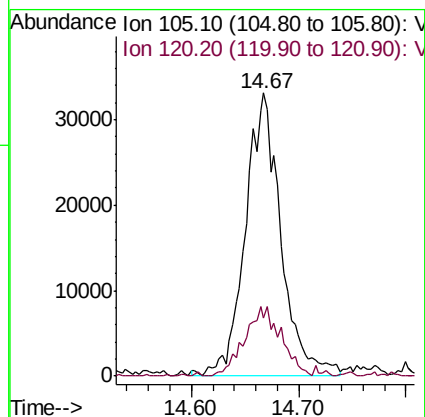
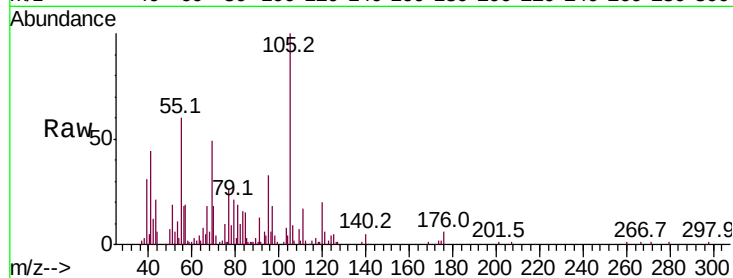
105 100

120 26.0 20.6 31.0

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#67

sec-Butylbenzene

Concen: 0.102 ppbv

RT: 17.28 min Scan# 4509

Delta R.T. -0.02 min

Lab File: VL036754.D

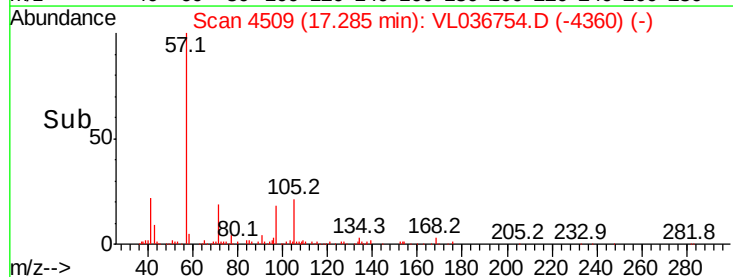
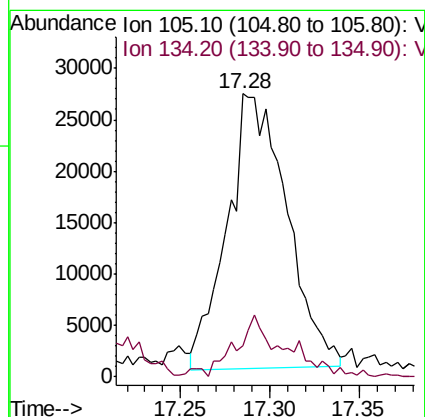
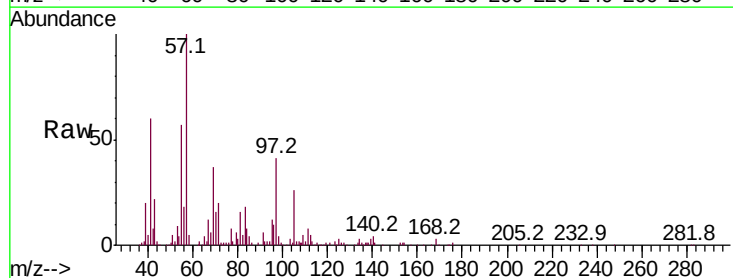
Acq: 8 Apr 2021 17:24

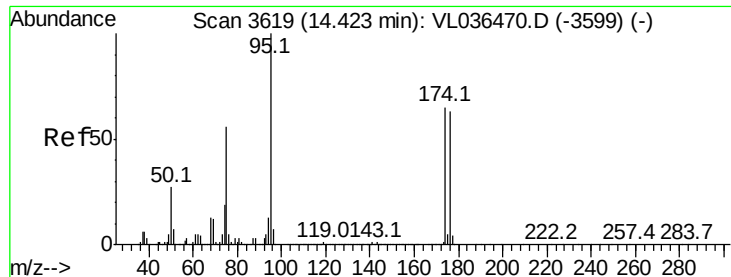
Tgt Ion:105 Resp: 62257

Ion Ratio Lower Upper

105 100

134 19.1 14.7 22.1





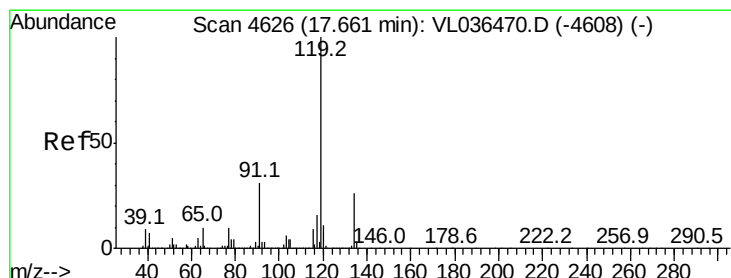
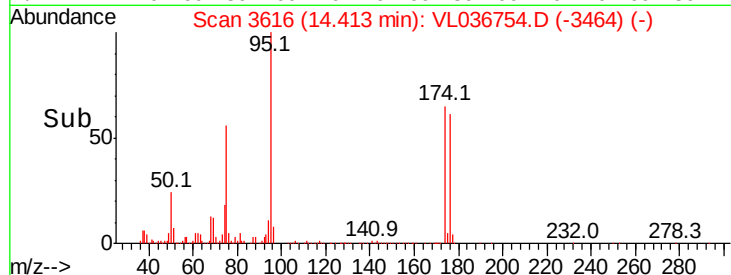
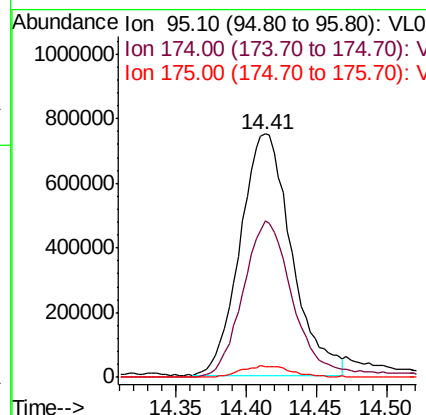
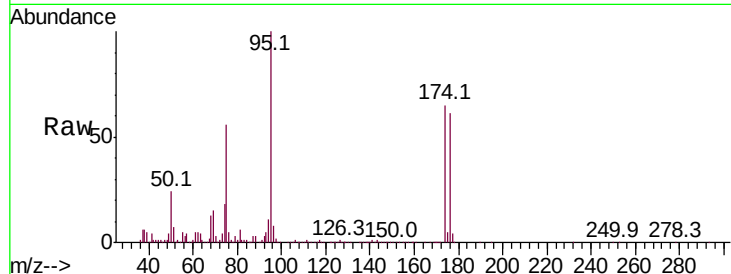
#68
 1-Bromo-4-Fluorobenzene
 Concen: 7.919 ppbv
 RT: 14.41 min Scan# 3616
 Delta R.T. -0.01 min
 Lab File: VL036754.D
 Acq: 8 Apr 2021 17:24

Instrument :
 MSVOA_L
 ClientSampled :
 SG-4DL

Tot Ion: 95 Resp: 1899756
 Ion Ratio Lower Upper
 95 100
 174 66.7 51.0 76.6
 175 5.0 3.9 5.9

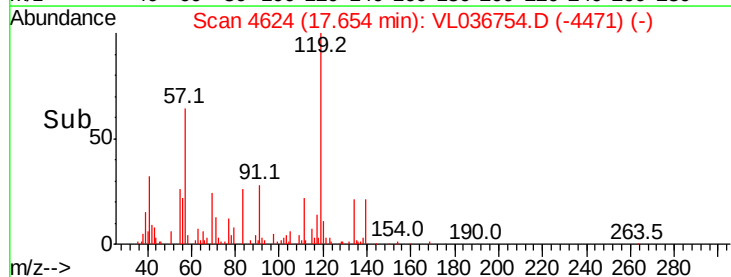
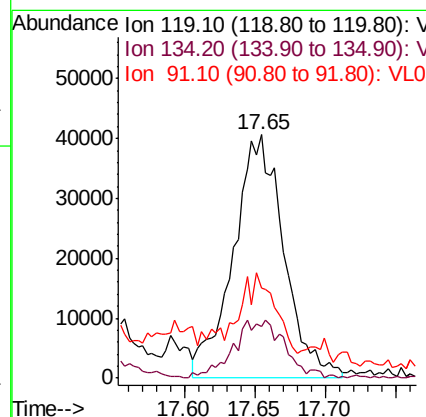
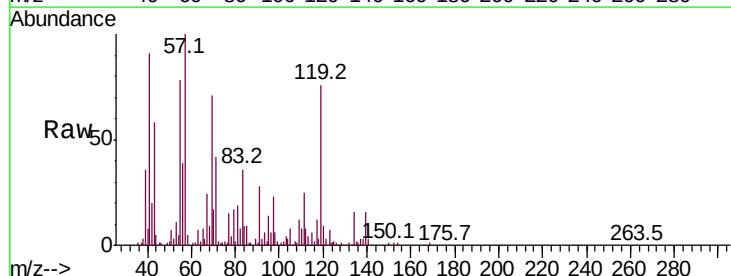
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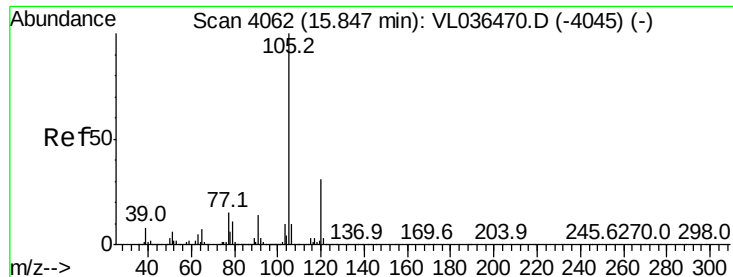
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#69
 p-Isopropyltoluene
 Concen: 0.213 ppbv m
 RT: 17.65 min Scan# 4624
 Delta R.T. -0.01 min
 Lab File: VL036754.D
 Acq: 8 Apr 2021 17:24

Tgt Ion: 119 Resp: 101162
 Ion Ratio Lower Upper
 119 100
 134 24.2 20.6 30.8
 91 37.7 25.0 37.6#





#72

4-Ethyltoluene

Concen: 0.260 ppbv

RT: 15.84 min Scan# 4059

Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

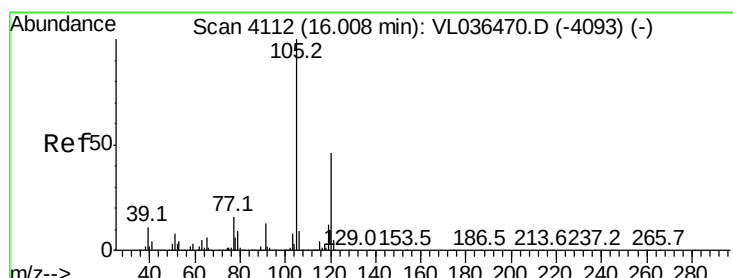
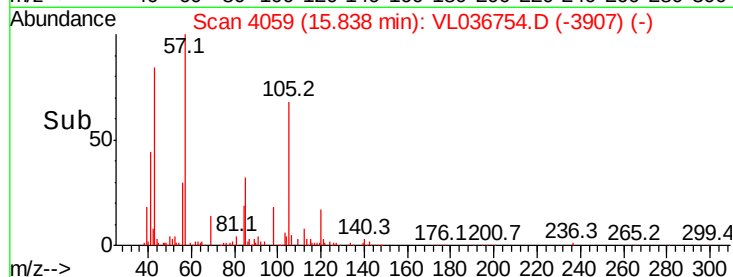
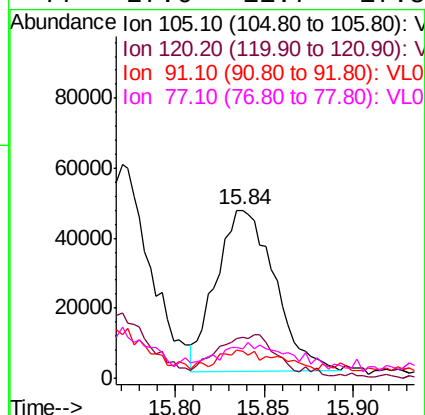
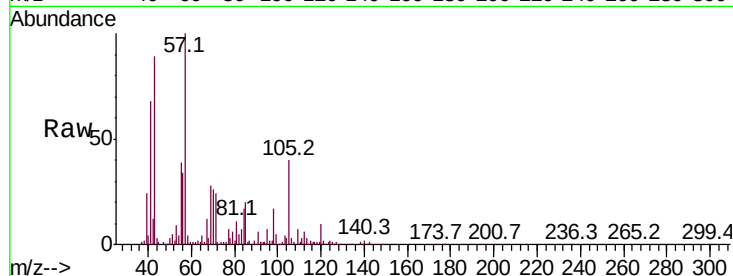
ClientSampleID :

SG-4DL

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	29.8	24.0	36.0
91	13.2	11.0	16.4
77	27.6	11.7	17.5#

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#73

1,3,5-Trimethylbenzene

Concen: 0.519 ppbv m

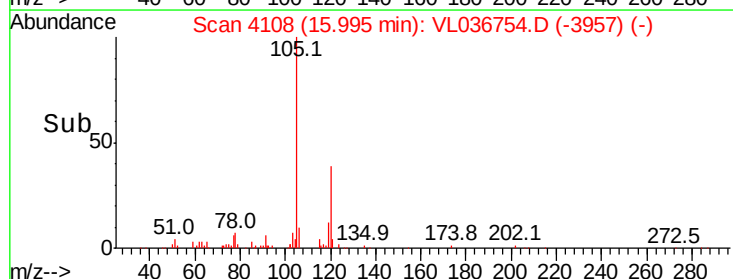
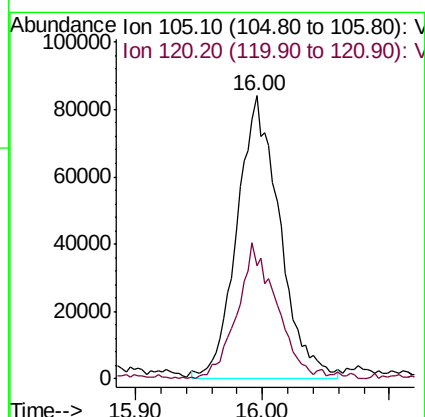
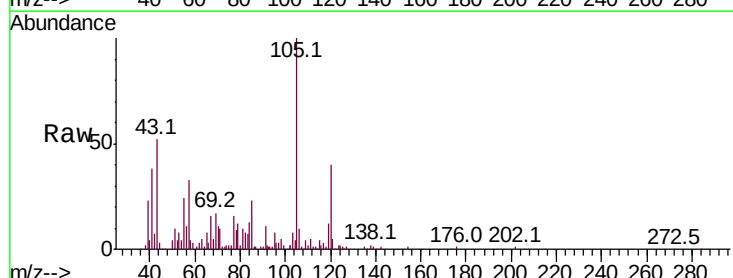
RT: 16.00 min Scan# 4108

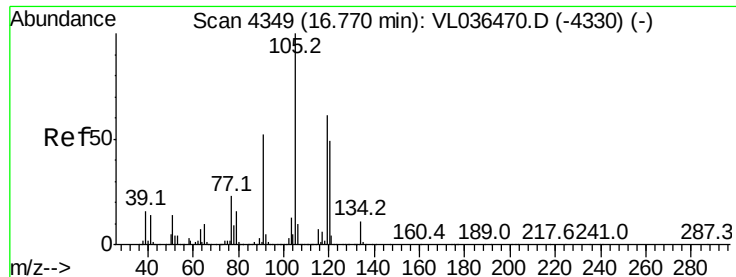
Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Tgt Ion	Ratio	Resp Lower	Upper
105	100		
120	39.8	36.6	54.8





#74

1,2,4-Trimethylbenzene

Concen: 0.737 ppbv

RT: 16.76 min Scan# 4347

Delta R.T. -0.01 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Instrument :

MSVOA_L

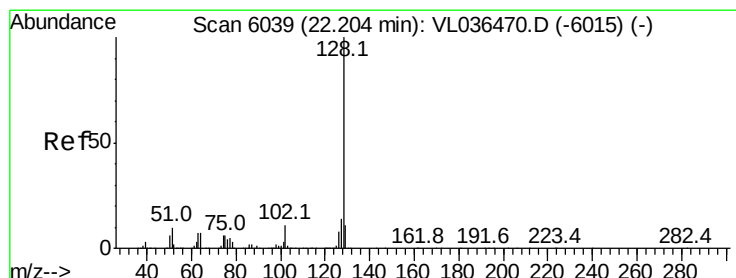
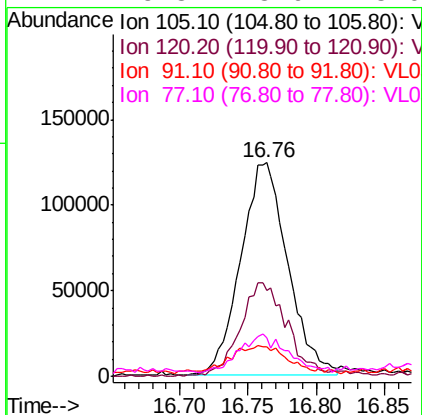
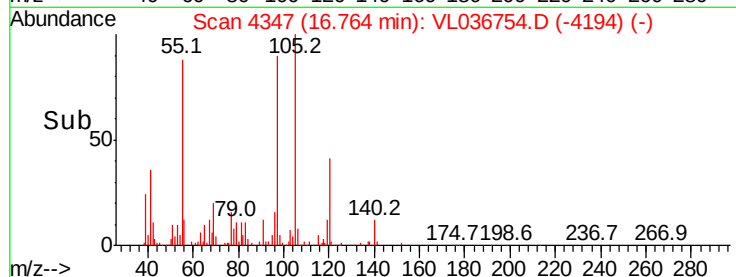
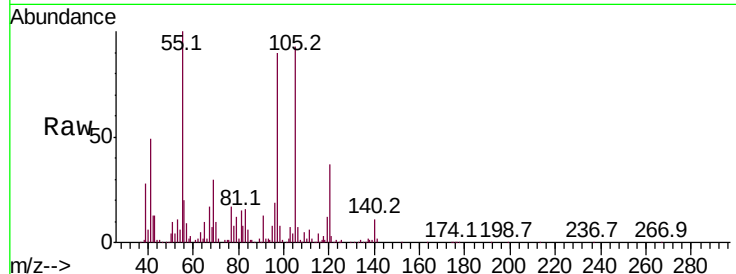
ClientSampled :

SG-4DL

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	40.2	39.2	58.8
91	11.7	42.6	64.0#
77	15.8	18.6	28.0#

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#79

Naphthalene

Concen: 0.169 ppbv m

RT: 22.21 min Scan# 6040

Delta R.T. 0.00 min

Lab File: VL036754.D

Acq: 8 Apr 2021 17:24

Tgt Ion	Ratio	Resp Lower	Upper
128	100		
127	7.7	10.9	16.3#
129	7.8	9.0	13.4#

